

Dwarf jelly lichen

Scytinium fragrans (syn. *Collema fragrans*)

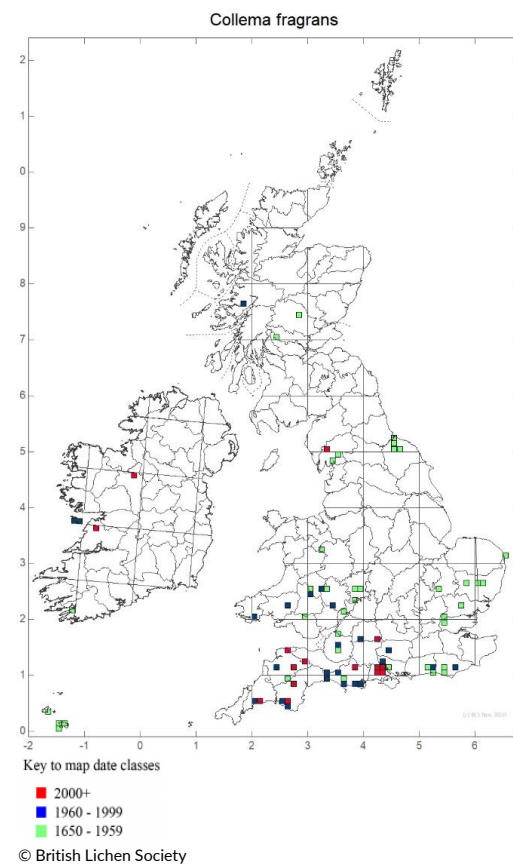


The Dwarf jelly lichen is a minutely foliose lichen i.e. one that is minutely leafy, with incised lobes that form small rosettes or cushions. It is dark olive-green to blackish when damp, browner when dry. It is usually abundantly fertile with small discs with thick rims, like tiny wine gums, scattered over the surface. It is similar to some other species of jelly lichen and usually needs microscopic examination to be certain of its identity.

It is a rare lichen in Britain, assessed as Endangered in the GB Red List on account of declines in recent decades, is Nationally Rare and is a S41 Priority Species in England.

Distribution

Although always uncommon, prior to Dutch elm disease this species was more widespread in GB, especially in the southern half of England. It has declined in recent decades with the loss of elm trees, one of its favoured trees.



Habitat

Dwarf jelly lichen is mostly found on the trunks of veteran trees with base-rich bark especially elm, but also Beech, Ash, Sycamore and very rarely old oak where there is a degree of natural nutrient enrichment resulting from wounds e.g. sap-runs and wound seepage tracks as well as on damaged bare wood. It favours well-lit trees e.g. in parklands and wood pastures and shares similar requirements to *Bellicidia incompta*, but is

significantly rarer, even on sites where both species are found together, suggesting it has very particular habitat requirements.



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Oak tree in old Savernake Forest with Dwarf jelly lichen (being inspected by a lichenologist). This is an old tree with a seepage track from a broken limb running down the left of the trunk.



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The same tree showing an increasing shade and competition threat from younger oak (planted in the 1940s) behind and thorny shrubs either side.

Current threats

Dwarf jelly lichen requires:

- Veteran trees with less acidic bark e.g. elm, Beech, Ash, Sycamore, Field maple and oak

- Continuity of habitat i.e. successive generations of suitable trees allowed to age naturally such that natural damage is able to occur to create the right niche
- Well-lit trunks
- Clean air

As such its main threats are:

- Death or collapse of suitable trees e.g. loss of elm to Dutch elm disease and now the loss of Ash to ash dieback
- Dwarf jelly lichen has been identified as at 'high risk' due to ash dieback
- Loss of continuity of suitable trees on a site and across the landscape
- Shade as a result of unmanaged regeneration and/or invasive non-native species inc. Ivy which can be a particular issue on boundary trees and in the absence of grazing/browsing or other management
- Air pollution, especially acidification e.g. from nitrous oxides and sulphur dioxide and excessive enrichment from ammonia

Habitat management

The aim of the following management advice is to ensure the long-term continuity and connectivity of Dwarf jelly lichen habitat:

- Maintain well-lit conditions in and around mature trees with basic bark in locations that support Dwarf jelly lichen e.g. by thinning regeneration (whilst being mindful of the need to retain some younger trees) and controlling invasive species, native or non-native e.g. Holly, *Rhododendron*.
- Halo thinning and other thinning works may be required to address understory and shade issues that have developed over time e.g. in response to changes in management.
- Ivy can be a particular problem and should be controlled when young growth is invading trees that support Dwarf jelly lichen or suitable ones nearby.
- One of the best ways to maintain suitable conditions is with a controlled grazing regime. As with any wood pasture or pasture woodland grazing management this needs to

be well considered and well managed to allow pulses of tree regeneration whilst maintaining generally open conditions.

- Avoid 'tidying up' of damaged trees.
- Identify younger suitable trees to become future veterans and manage around them to create the right conditions.
- If no suitable trees exist plant future veterans, selecting species with naturally base-rich bark such as disease resistant elm or Ash (if available), Field maple, Sycamore, Beech and Horse chestnut close to existing populations, although not so close as to cause shade and competition issues.
- Remove or reduce sources of locally generated atmospheric pollutants e.g. by reducing stocking levels if excessive and by limiting fertilising of grasslands.
- Trial management (veteranisation) of younger trees and translocation has been trialled as part of the Back from the Brink Ancients of the Future project, but is at too early a stage to report on success or otherwise. Although targeted at *Bellicidia incompta* this may prove useful for Dwarf jelly lichen too.

Survey methods

Surveying for Dwarf jelly lichen requires a specialist lichen surveyor.

The Back from the Brink Ancients of the Future project is led by Buglife in partnership with Plantlife and the Bat Conservation Trust.

